# Status and migration of the Slender-billed Gull (Larus genei) in Bulgaria

#### DIMITAR N. NANKINOV

Institut of Zoology, Bulgarian Academy of Science, Bul. Tzar Osvohoditel 1, 1000 Sofia, Bulgaria

Abstract — The earliest Slender-billed Gulls arrive in Bulgaria after July 5. Some 72.7% migrate to the Mediterranean in August-October. A tiny number, 1.0 to 2.2% of the birds spend the winter and spring in Bulgaria. The Black Sea is the spring flight route. Nesting by the Slender-billed Gull may be expected in Lake Atanassovsko.

### Introduction

It is known that the Slender-billed Gull (Larus genei) is a Sarmatian species which occurs unevenly; the major nesting sites are along the northern Black Sea, around the Caspian Sea, the Persian Gulf and in Central Asia. Over the past three decades the area has expanded westwards and nesting has been observed at the Mediterranean wintering sites and on the African coasts (Isenmann 1976, Cramp and Simmons 1983).

Although many authors report on the Slender-billed Gull, it continues to be a bird that has not been studied enough in Bulgaria. In the 1950s (Patev 1950) it was not counted as a member of the Bulgarian fauna. The bird was "rediscovered" (Prostov 1955, Boev 1957) although scientists had previously encountered it along the Bulgarian Black Sea (Skorpil 1892) and even watched it nest regularly there and in Dobroudja (Alleon 1886, Boetticher 1927, Petrov 1950).

## Material and Methods

Information about the Slender-billed Gull was collected by fieldwork in the territory of Bulgaria and in all seasons, and by a review of the literature records about 43 ringed birds are kept in the Bulgarian Ornithology Centre (Prostov 1955 and 1964, Boev 1957, Semenov and Sabinevski 1957, Paspaleva 1962, Paspaleva-Antonova 1961 and 1965, Paspaleva and Dontschev 1970, Dontschev 1976, Roberts 1980 and 1981, Nankinov 1982 and 1985 and others). The scientific information thus collected was used to clarify in which regions of the country the bird occurs, the dynamics of numbers throughout the year, and the migration periods and migratory routes.

#### Results and Discussion

Processing of the fieldwork results established that a total of 14,727 Slender-billed Gulls have been recorded at 33 points in Bulgaria (Figure 1-A). Of these 90.7% occured at Lake Atanassovsko where the species forms concentrations exceeding 1000. At Lake Pomorie there are concentrations of several hundred birds (7.5%). The remaining 31 points host just 1.8% of the Slender-billed Gulls in Bulgaria. The results of ringing the birds provide an approximately similar picture of the distribution of the species in Bulgaria. Slender-billed Gulls ringed in the Ukraine migrate to different Bulgarian regions but it is the Black Sea coast and the Upper Thracian Plain where they occur in greatest numbers. Lakes Atanassovsko and Pomorie, where 32.6 and 27.9% of the ringed birds have been found, and the banks of the river Maritsa, around Pazardjik - 16.3% (Figure 1-B), are of primary importance. These three locations are the habitat of 76.8% of the Slenderbilled Gulls. The remaining 23.3% are scattered around the country's water-bodies.

The Slender-Billed Gull is a permanent resident in Bulgaria. After July 5 numerical growth and appearance of flocks along the southern coast are observed (Figure 2). Young Slender-Billed Gulls leave the nest island along the northern Black Sea in early July (Semenov and Sabinevski 1957, Siokhin et al. 1988). The first young birds therefore reach Bulgaria some five days after leaving the nest islands. The July encounters constitute 10.8% of the total annual number of these birds in Bulgaria. August (28.2%), September (24.2%) and October (20.2%) are the months of migration in greatest numbers when most of the population of this species (72.7%) flies across the Black Sea coast on its way to the wintering site. The last migrants make for the

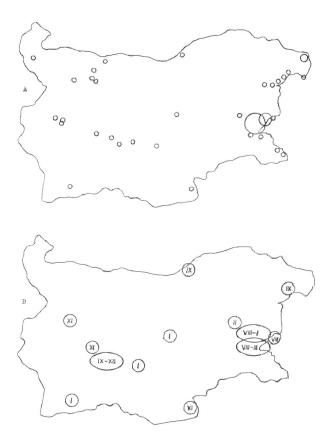


Fig. 1 - The location of the Slender-billed Gull in Bulgaria. A - Concentrations observed:

- -1-100 birds; Over 500 birds;
Over 100 birds;
Over 1000 birds;

B - Birds, ringed in the Chernomorski Reserve in the Ukraine from 16.VI. to 4.VII., and found in Bulgaria between 1.VIII. and 27.III.

Mediterranean in November. After that the numbers of Slender-billed Gull in Bulgaria do not fluctuate markedly. From 1.0 to 2.2% of the birds stay in the country over the winter. In spring their percentage is 1.1 - 1.8 and in June 0.5. These percentages suggest that the birds that remain in Bulgaria after November are the same (young birds and birds that have not reached sexual maturity) and wander from one Bulgarian water-body to another till summer. It is noteworthy that a number of the birds with rings that are found in Bulgaria have been ringed together in the Chernomorski Zapovednik and during the first months they stick together, usually at Lakes Atanassovsko an Pomorie. This confirmes (Semenov and Sabinevski 1957, Siokhin et al. 1988) that the Slender-billed Gull flocks are homogeneous in terms of age. Later (after September) some birds

left the flocks and migrated from the coastal biotopes westwards to the Upper Thracian Plain. Mass migrations and numerical increase are not observed in the Slender-billed Gull in Bulgaria in spring. The small groups observed after mid-winter and spring are some of the birds that winter in the country, and when they reach sexual maturity they will probably move to the Black Sea coast and from there, to their first nesting sites. The Slender-billed Gulls that return from the Mediterranean do not cross Bulgaria and arrive from the direction of the Black Sea. Few flights have been observed over the coast in spring. In summer and spring the Slenderbilled Gull therefore migrates from the nesting site to the Mediterranean via the southern Black Sea coast. The stray birds that reach inland water-bodies in Bulgaria do not migrate further, and winter there. They do not go more than 500-600 km from the sea, as in neighbouring Serbia the species is very rare (Matvejev and Vasic 1973). The ringed Slenderbilled Gulls so far found in Bulgaria all come from the Chernomorski Zapovednik in the Ukraine (Figure 1-B).

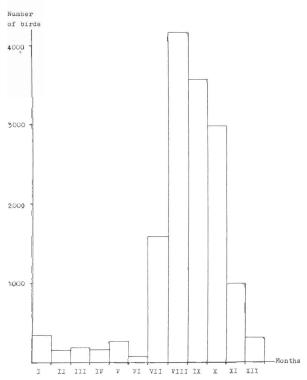


Fig. 2 - Season distribution of the Slender-billed Gull (Larus genei) in Bulgaria.

They were ringed between June 16 and July 4 and resided in Bulgaria between August 1 and March 27. They reached the Bulgarian shores a month and three days after they were ringed. However, as has

already been said, the young birds that left the nests first may arrive in Bulgaria much earlier. Conclusions can be drawn from the ringed birds about the age of the Slender-billed Gulls in Bulgaria. 14.6% of the birds are two months old, 17.1% three months, 61% overall - up to six months old, 19.5% - from six months to one year, 7.3% - two years, 9.8% - three years and 2.4% - five years. The oldest Slender-billed Gull found in Bulgaria was 4 years 7 months and 16 days old. These birds can live as long as 23 years and 4 months (Rydzewski 1978). Swamps, lakes, river mouths, sea bays, dams and fish nurseries that have shallow patches and are rich in food are the habitats of the Slender-billed Gull in Bulgaria. In winter the Gull visits out of-town garbage pits. The hyperhaline Lakes Atanassovsko and Pomorie, which are rich in food (mainly Artemia salina), are regular summer habitats of the species. However nests with eggs and broods have not vet been found. The reason may be sought in a number of negative factors, mainly predators: stray dogs and cats, foxes, jackals, wild boars, and regular human presence during the nesting period which discourage the birds from nesting. Nonetheless, we have reason to suppose that the Slender-billed Gull will breed again in the lakes and swamps along the Bulgarian Black Sea coast. We think that the nesting area expansion which started a few decades ago in the Mediterranean is the return of the species to previous nesting regions used in the late 19th and early 20th century (Wallace 1964). Over the next few years it may be expected that the Gull will breed at Lake Atanassovsko and one of the arguments is that the Mediterranean Black-headed Gull (Larus malanocephalus) is already breeding there (200 pairs at the most in 1984), as is the Sandwich Tern (Sterna sandvicensis, 2 pairs in 1981, 280 nests in 1992). It is known (Zubakin 1988) that the Mediterranean Black-headed Gull and the Slender-billed Gull follow the Sandwich Tern in the expansion of its nesting area and settle in the biotopes where it broods and form mixed colonies with it. The Slender-billed Gull is a listed bird in Bulgaria; it is included in the country's Red Book. Lake Atanassovsko, the major habitat of the Slender-billed Gull, is a reserve.

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